












Date: Friday, 17/10/2008 12:42:51 PM
User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : AFT MAINTENACE STEP
Job Number : 42720	
Estimate Number : 12455	
P.O. Number :	Part Number : D350591133
This Issue : 17/10/2008 S.O. No. :	Drawing Number : D2946 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LARGE FAB ASSY	Drawing Revision : REV. B
Previous Run : 38537	Material :
Written By :	Due Date : 31/10/2008 Qty: 4 Um: Each
Checked & Approved By : <u>JUD 08-10-17</u>	
Comment : Est Rev:B 05.10.14 ; Modified step 10 KJ/EC Est Rev:B 06.07.19 D2946 @ rev.b EC	
Additional Product	
Job Number: 	
Seq. #:	Machine Or Operation: Description :
1.0	DC DOCUMENT CONTROL
	 <u>H for JUD 08/11/10</u> 
Comment: DOCUMENT CONTROL Photocopy bluefile and type labels as per PPP D350-591-133 CHG002 <u>S 09/01/20</u>	
2.0	D2622120C Step Extrusion
	 
Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s) Pick: Qty Part Number Description Batch 1 D2622-120C Extrusion <u>B42155</u> <u>SAN 08-12-18</u> 4	
3.0	LARGE FAB 1 LARGE FABRICATION RESOURCE 1
	 
Comment: LARGE FABRICATION RESOURCE 1 1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946 <u>SAP 08-12-18</u> 2-Deburr **Ensure that 57.09" minimum extrusion is kept and identify to be used for D350-591-215/-216.** <u>SAP 08-12-18</u> (4)	
4.0	QC5 INSPECT WORK TO CURRENT STEP
	 <u>08-12-30</u> (4) 
Comment: INSPECT WORK TO CURRENT STEP	
5.0	D2734 Step End Plate
	 
Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s) Pick: Qty Part Number Description Batch <u>09.01.09</u> 4	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Part Number: D350591133

Job Number:



Seq. #:

Machine Or Operation:

Description :

2 D2734

End Plate

839179 = 4
843535 = 4

1/8 09.01.05 4

6.0

D2944

Step Mounting Plate



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2944

Support

836405

1/8 09.01.05 4

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Deburr and Bevel ends for welding

1/8 09.01.05 4

2-Weld (1) End Cap and (2) Lugs using Jig DT8440 as per Dwg D2946

A/R Aluminum Rod

7109560
7108037

1/8 09.01.05 4

3-Grind End Cap welds flush

SAD 09-01-06 (4)

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

BE 09-01-06 4

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/01/06 (x4)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 09-01-07 (4)

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

1/8 09.01.09 4

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Job Number: 42720

Part Number: D350591133

Job Number:



Seq. #: Machine Or Operation: Description :

12.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Remove alodine prior to welding. Weld end cap as per Dwg D2946. Grind end cap weld flush.

A/R

AL ROD

BATCH:

M108037

KE 09-01-09

4

13.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

KE 09-01-12

4

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/01/12 (4)

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch Up Chemical conversion

FL 09/01/14

(4)

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

1:20

OVEN TEMPERATURE:

320°

FINISH TIME:

1:50

FL 09/01/14

(4)

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D2946 and QSI 005 4.4

FL 09/01/15

(4)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

S 09/01/20 (4)

W/O:		WORK ORDER CHANGES					
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Job Number:



Seq. #: Machine Or Operation: Description :

19.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Pick Packing Kit

20.0 D22301 Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s)
Mounting Lug
Batch: 93444

21.0 D22303 Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s)
Mounting Lug
Batch: 43223

22.0 D2856400 Abrasion Strip



Comment: Qty.: 1.2606 f(s)/Unit Total: 5.0425 f(s)
Abrasion Strip 7.20" long x2
Batch: B4276

23.0 D2945 Step Mounting Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
Step Mounting Plate
Batch: 35620

24.0 AN47A Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)
Bolt
Batch: M100928

25.0 AN411A Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s)
Bolt
Batch: M106665

9/01/16 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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26.0 AN414A Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s)

Bolt

Batch: M107034

27.0 AN960JD416 Washer



Comment: Qty.: 14.0000 Each(s)/Unit Total: 56.0000 Each(s)

Washer

Batch: M108816

M109249

28.0 MS21042L4 Nut



Comment: Qty.: 14.0000 Each(s)/Unit Total: 56.0000 Each(s)

Nut

Batch: M109282

29.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

30.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-213

Location: 80

PPP Rev: 0

31.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 09.01.21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DART

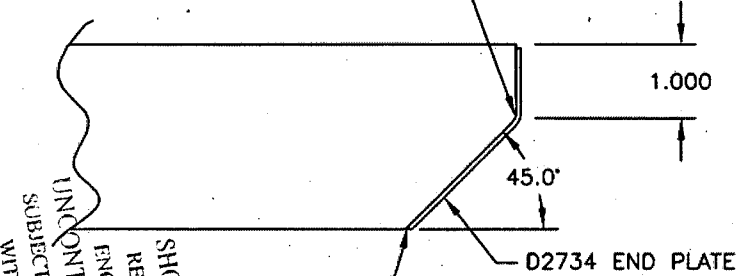
D2946 STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2946	Step Assembly	X
D2622-63	STEP EXTRUSION*	1
D2734	END PLATE	2
D2944	STEP MOUNTING PLATE	2

*cut per drawing

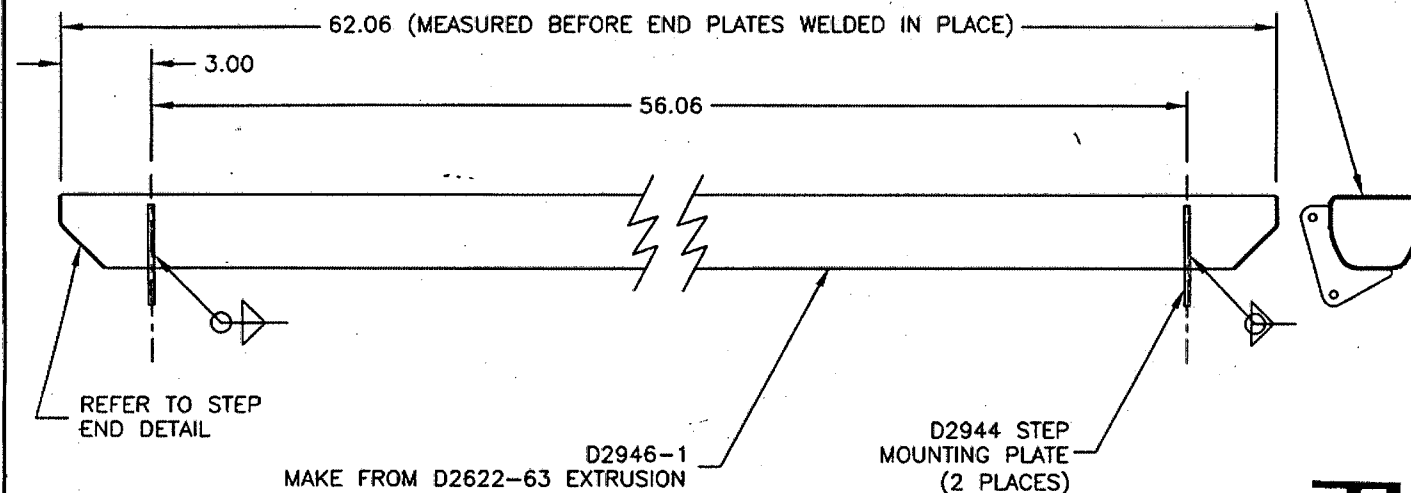
NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004

ROUND CORNER OF EXTRUSION TO MATCH BEND RADIUS OF END PLATE



TYPICAL STEP END DETAIL
NOT TO SCALE

APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D2946-041 STEP ASSEMBLY

D2946 STEP ASSEMBLY

- 1) MAKE FROM D2622 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ENTIRE ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DESIGN	DRAWN BY	TITLE	REV. B
CP	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 1
DATE		D2946	SCALE
05.11.14		STEP ASSEMBLY	1:6
A	99.12.13	NEW ISSUE	
B	05.11.14	UPDATE FINISHING NOTE	

RELEASED
05.11.28